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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,221	08/13/2001	Stephen F. Gass	SDT 302	2131
27630	7590	10/23/2006	EXAMINER	
SD3, LLC 25977 S.W. Canyon Creek Road, Suite G WILSONVILLE, OR 97070			ALIE, GHASSEM	
			ART UNIT	PAPER NUMBER
			3724	
DATE MAILED: 10/23/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/929,221

Applicant(s)

GASS ET AL.

Examiner

Ghassem Alie

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6, 9-14, 16, 17, and 19-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6, 9, 11-14, 16, 17 and 19-34 is/are allowed.
- 6) ☒ Claim(s) 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

References Cited (PTO-892)

Examiner's Patent Drawing Review (PTO-948)

Disclosure Statement(s) (PTO-1449 or PTO/SB/08)

Mail Date 07/18/06&07/20/06

4) ☐ Interview Summary (PTO-413)

Paper No(s)/Mail Date. \_\_\_\_\_

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Terauchi (4,512,224). Regarding claim 10, Terauchi teaches a woodworking machine including a motor and a rotatable electrically isolated arbor 121 configured to be driven by a motor, where the arbor has an outer surface. Terauchi also teaches a circular blade 12 coupled to the arbor 121 and an excitation system adapted to generate an electrical signal.

It should be noted that the capacitive coupling includes an outer surface of the arbor, a metal bar G, and dielectric members 40 which isolate the arbor and the blade from the table 10 and metal bar G. Bolts and washers 41, 42 which are located near the belt 123 are considered as the dielectric. The dielectric member 40 is located between the arbor 121 and the metal bar G. It also should be noted that an AC voltage is applied to the cutting blade through the through the bearing 14a which is considered as the excitation system. A current flows between the cutting blade and the bar G in accidental contact of the blade with the bar G. The current is used as a detection signal for a capacitive coupling. It should also be noted that the outer surface of and the blade is considered to be one of the spaced-apart conductors of the capacitive coupling. Terauchi also teaches a capacitive coupling adapted to capacitively

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couple the excitation system to the arbor 121 and transfer at least a portion of the electrical signal to the blade. Terauchi also teaches that the capacitive coupling includes two spaced-apart conductors with a dielectric 40 between them, and where at least a portion of the outer surface of the arbor is one of the conductors. See Figs. 1-6 and col. 2, lines 1-68 and col. 3, lines 1-60 in Terauchi.

***Allowable Subject Matter***

3. Claims 1-6, 9, 13, 14, 16, and 17, 19-24 12 are allowed. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to teach a contact detection system adapted to detect contact between a person and a cutting toll, and a reaction system that stops the movement of the blade upon detection of contact between a person and cutting toll as set forth in claim 12. The prior art also does not teach a contact detection system configured to detect contact between a person and the cutting tool as set forth in claims 1 and 17.

***Response to Amendment***

4. Applicant's arguments that Terauchi does not teach a capacitive coupling between guide G and the drive shaft 121 is not persuasive. Terauchi teaches a capacitive coupling adapted to capacitively couple the excitation system to the arbor 121 and transfer at least a portion of the electrical signal to the blade. A current flows between the cutting blade and the bar G in accidental contact of the blade with the bar G. The current is used as a detection signal for a capacitive coupling. It should be noted that the capacitive coupling includes an outer surface of the arbor, a metal bar G, and dielectric members 40 which isolate the arbor and the blade from the table 10 and metal bar G. Bolts and washers 41, 42 which are located

near the belt 123 are considered as the dielectric. See Figs. 1-6 and col. 2, lines 1-68 and col. 3, lines 1-60 in Terauchi.

The transfer of current from the excitation 14a to the blade is done by outer surface of the arbor and the dielectric members 40 which are considered to be a capacitive coupling, since they electrically couple two metal elements together. It should be noted that claim 10 is so broad that does not even define a capacitive coupling as described in the instant invention. The signal also has not been defined. An electric charge also can be considered as a signal. The transfer of current or an electric signal from the arbor to the blade is done through a capacitive coupling. The transferred of an electric charge between the two metal or conductive parts are considered to be done by a capacitive coupling, since a capacitive coupling also transfers electric charge from one metal to another..

#### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (571) 272-4501.


The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, SEE <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GA/ga

October 2, 2006



**BOYER D. ASHLEY**  
**SUPERVISORY PATENT EXAMINER**